

UNITED STATES PATENT AND TRADEMARK OFFICE



UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FI	LING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET	NO. CONFIRMATION N	Ю.
10/714,149	11/14/2003			Conway Francis Spykerman	003D.0020.U1(US	S) 2379	2379
29683	7590	07/01/2004	•		EXAMINER		
		MITH, LLP	GUSHI, ROSS N				
4 RESEARCH DRIVE SHELTON, CT 06484-6212					ART UNIT	PAPER NUMBER	١.
SILLETOIN,	01 00.0	,, , , , , , , , , , , , , , , , , , , ,			2833	· · · · · · · · · · · · · · · · · · ·	

DATE MAILED: 07/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)	Applicant(s)	
		10/714,149	SPYKERMAN, C	SPYKERMAN, CONWAY FRANCIS	
Office Action Su	mmary	Examiner	Art Unit		
		Ross N. Gushi	2833		
The MAILING DATE of to Period for Reply	his communication app	ears on the cover sheet	with the correspondence a	ddress	
A SHORTENED STATUTORY THE MAILING DATE OF THIS - Extensions of time may be available und after SIX (6) MONTHS from the mailing of - If the period for reply specified above, - Failure to reply within the set or extended Any reply received by the Office later that earned patent term adjustment. See 37	communication. er the provisions of 37 CFR 1.13 date of this communication. ess than thirty (30) days, a reply the maximum statutory period w d period for reply will, by statute, n three months after the mailing	within the statutory minimum of ill apply and will expire SIX (6) No cause the application to become	a reply be timely filed thirty (30) days will be considered time IONTHS from the mailing date of this of ABANDONED (35 U.S.C. § 133).		
Status					
1) Responsive to communi	cation(s) filed on				
2a) ☐ This action is FINAL .		action is non-final.			
<u> </u>		•	atters, prosecution as to th C.D. 11, 453 O.G. 213.	e merits is	
Disposition of Claims					
4) ⊠ Claim(s) <u>1-15</u> is/are pen 4a) Of the above claim(s 5) ☐ Claim(s) is/are all 6) ⊠ Claim(s) <u>1-6,10 and 13-</u> 7) ☐ Claim(s) <u>7-9,11 and 12</u> i 8) ☐ Claim(s) are subj) is/are withdrav owed. 1 <u>5</u> is/are rejected. s/are objected to.				
Application Papers					
• • • • • • • • • • • • • • • • • • • •	4 November 2003 is/and that any objection to the obt(s) including the correction	re: a)⊠ accepted or booldrawing(s) be held in abeon on is required if the drawi	yance. See 37 CFR 1.85(a). ng(s) is objected to. See 37 C	CFR 1.121(d).	
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made a) All b) Some * c) 1. Certified copies of 2. Certified copies of 3. Copies of the cert	None of: the priority documents the priority documents fied copies of the prior ne International Bureau	have been received. have been received ir ity documents have be (PCT Rule 17.2(a)).	n Application No en received in this Nationa	l Stage	
Attachment(s)	_	🗖			
 Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Dravas Information Disclosure Statement(s) Paper No(s)/Mail Date 	ving Review (PTO-948)	Paper	w Summary (PTO-413) No(s)/Mail Date of Informal Patent Application (PT	O-152)	

Application/Control Number: 10/714,149

Art Unit: 2833

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in -
- (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or
- (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a);

Claims 1-6, 10,13, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Yurtin. Regarding claims 1 and 15, Yurtin discloses an electrical connector to (i.e. capable of making) make an electrical connection between a first electrical device 24 and an electrical trace of a circuit of a second electrical device, said first electrical device 24 being of a kind which includes two surfaces the planes of which are not parallel to each other, wherein a first of said two surfaces has disposed thereon a first conductive pad region and a second of said two surfaces has disposed thereon a second conductive pad region wherein said first and second conductive pad regions are in electrical connection with each other, said electrical connector comprising: a housing 10, at least one conductive element 32 carried by said housing and which includes a first contact region (e.g. at 248) for engagement with said first conductive pad region, a second contact region (e.g. at 252) for engagement with said second conductive pad

region, and a third contact region (e.g. at 264) to make (i.e. capable of making) contact with said electrical trace of said second electrical device to create an electrical connection thereof with said first and second conductive pad regions, the conductive element carried by said housing to present at least said first contact region in a resiliently movable (manner) for compressive engagement with said first conductive pad region and said second contact region in a resiliently movable manner for compressive engagement with said second pad region, each of said first and second contact regions being movable in a direction away from but resiliently biased towards the respective pad regions with which said contact regions are to engage.

Per claim 2, said first contact region is deflectable relative to said housing along a path which is not parallel to the path along which said second contact region is deflectable relative to said housing.

Per claim 3, the path along which said first contact region is resiliently movable is substantially transverse to the path along which said second contact region is resiliently movable.

Per claim 4, the path along which said first contact region is resiliently movable is substantially perpendicular to the path along which said second contact region is resiliently movable.

Per claim 5, said conductive element includes of a fixing region (at 216a) which is engaged to the housing in a secure manner and has dependent therefrom (a) a first leg which includes at or towards a region distal from said fixing region, said first contact region and (b) a second leg which includes at or towards a region distal from said fixing

Application/Control Number: 10/714,149

Art Unit: 2833

region, said second contact region, said legs being disposed in a resiliently movable manner from said fixing region.

Per claim 6, the first contact region is positioned by said first leg to become engaged with said first conductive pad region in a manner wherein said first conductive pad is pressed onto said first contact region with negligible movement of said first contact region in a direction over the first conductive pad region and said second contact region is positioned by said second leg to become engaged with said second conductive pad region in a compressive manner with movement of said second contact region in a direction over the second conductive pad region.

Per claim 10, said first and second contact regions are each movable along a path lying in a plane wherein the plane of said first leg is parallel to the plane of the second leg.

Per claim 13, the shape of the conductive element is defined by out plane folding from a stamped sheet metal material.

Claim 14 is rejected under 35 U.S.C. 102(b) as being anticipated by Friend. Per claim 14, Friend discloses an electrical connector formed of a sheet metal material, to provide electrical connection between an electrical trace of a PCB and an electrical trace of a second electrical device said electrical connector comprising a first contact region provided on or carried by a first leg 22 which extends from a mounted or mounting section engaged or to be engaged to the second electrical device, said first contact region displaceable in a resilient manner relative to said mounted or mounting section in a direction along a first path during such engagement thereof by a first

surface of a PCB, a second contact region 28 provided on or carried by a second leg 24 which extends from said mounted or mounting section, said second contact region displaceable in a resilient manner relative to said mounted or mounting section in a direction along a second path during such engagement thereof by a second surface of a PCB, the first path being perpendicular to the second path, a third contact region 18 engaged or engageable for electrical connection to the electrical trace of said second device wherein said electrical connector is able to make a two point contact with said electrical trace of said PCD which is provided in part on each of said first and second surfaces to establish at least in part, two flow paths for electricity between said electrical trace of said PCB and said electrical trace of second electrical device.

Allowable Subject Matter

Claims 7-9, 11, 12, are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claim 7, the prior art does not suggest the connector as claimed, including the combination of all the claimed elements, the combination including a first electrical device holding means is provided in a fixed relationship to said housing, said holding means able to receive at least part of said second electrical device in a manner so as to hold it in a relationship wherein the first and second contact regions are in a compressive engagement with respective first and second conductive pad regions.

Regarding claim 9, the prior art does not suggest the connector as claimed, including the combination of all the claimed elements, the combination including that

Art Unit: 2833

said second leg includes a section thereof sloping relative to the path of deflection of said second contact region, and which provides a ramp along which said second surface is able to travel in non parallel direction to thereby displace said second contact region along its path of resilient movement during engagement of said first electrical device therewith.

Regarding claim 11, the prior art does not suggest the connector as claimed, including the combination of all the claimed elements, the combination including that said housing is affixed to said second electrical device in a permanent manner and is able to receive said first electrical device engaged thereto in a releasable manner.

Regarding claim 12, the prior art does not suggest the connector as claimed, including the combination of all the claimed elements, the combination including that said housing has a plurality of said conductive elements spaced apart in an array to each have their respective first and second contact regions engage with a corresponding first and second conductive pad regions of a single PCB.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ross Gushi whose telephone number is (571) 272-2005. If attempts to reach the examiner by phone are unsuccessful, the examiner's supervisor, Paula A. Bradley, can be reached at 571-272-2800 extension 33. The phone number for the Group's facsimile is (703) 872-9306.

for M